

REMARKS

Claims 1-36 are pending in this application. Claims 1-6, 10-15, 19-24 and 28-33 are rejected. Claims 7-9, 16-18, 25-27 and 34-36 are objected to. Claims 7, 16, 25, and 34 have been cancelled. Claims 1-6, 8-15, 17-24, and 26-33, 35, and 36 remain in the case for reconsideration. Reconsideration is requested. No new subject matter has been added.

Allowable Subject Matter

Claims 7-9, 16-18, 25-27 and 34-36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 5, 14, 23, and 32 have been amended to include the limitations of allowable claims 7, 16, 25, and 34. Accordingly, claims 5, 6, 8, 9, 14, 15, 17, 18, 23, 24, 26, 27, 32, 33, 35, and 36 are all allowable.

Claim Rejections - 35 U.S.C. §112

Claims 1-4 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 has been amended as requested by the Examiner. Accordingly, claims 1-4 are allowable under 35 U.S.C. § 112.

Claim Rejections - 35 U.S.C. § 103

Claims 1-6, 10-15, 19-24 and 28-33 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Benveniste (US Patent Application Publication No. 20020163933) in view of Ho (U.S. Patent No. 6,970,422). The Examiner acknowledges that Benveniste fails to fully disclose communicating that subsequent contending requests are permissible even if made before the scheduled ending time and receiving transmitted contending request for requesting reservation of subsequent non-contending wireless data transmissions before the scheduled ending time.

However, the Examiner states that Ho discloses communicating a contention control frame that subsequent contending requests are permissible even if made before the scheduled ending time and receiving transmitted contending request for the requesting reservation of subsequent non-contending wireless data transmissions before the scheduled ending time based

contention control frame. The Examiner cites FIGS. 10, 11a, and 12a; and col. 21, line 30 to col. 22, line 7; and col. 22, line 64- col. 23, line 27 for support. The rejection is respectfully traversed.

The system in Ho attempts to conserve bandwidth by using a multi-poll frame to allocate Transmission Opportunities (TOs) to multiple different non-PC/AP stations. Col. 19, lines 4-26. However, there is no indication in Ho of:

“determine that one of the wireless non-contending wireless data transmissions through the monitored medium ended before the scheduled ending time;

communicate that subsequent transmitting of contending requests for subsequent non-contending wireless data transmissions are permissible before the scheduled ending time;

receiving transmitted contending requests for requesting reservation of subsequent non-contending wireless data transmissions before the scheduled ending time; and

scheduling a new time window for other non-contending wireless data transmissions during which contending requests are impermissible according to the transmitted contending requests received before the scheduled ending time”, as specified in claim 1.

The Contention Free Period (CFP) referred to in Ho is not equivalent to the time-window for the non-contending wireless data transmissions specified in claim 1. Claim 1 specifies: “receive contending requests for respective non-contending wireless data transmissions through a medium; schedule an ending time of a time window for the non-contending wireless data transmissions during which contending requests are impermissible”. The CFP in Ho allows contending requests. Refer to FIGS. 10 and 11a where contending Reservation Requests (RRs) are permissible. Specifically, refer to FIG. 11a where two RRs collide in the third CFP. These RRs are sent during Centralized Contention Intervals (CCIs).

The only time windows in Ho that are used for non-contending wireless data transmissions through a medium during which contending requests are impermissible, appear to be the allocated Transmission Opportunities (TOs) or TXOPs. See FIGS. 10, 11a, and 12. However, there is no suggestion in Ho of:

communicating that subsequent transmitting of contending requests for subsequent non-contending wireless data transmissions are permissible before the scheduled ending time of the TXOPs;

receiving transmitted contending requests for requesting reservation of subsequent non-contending wireless data transmissions before the scheduled ending time of the TXOPs; and

scheduling a new time window for other non-contending wireless data transmissions during which contending requests are impermissible according to the transmitted contending requests received before the scheduled ending time of the TXOPs in Ho as required in claim 1.

In fact Ho teaches away from the scheduling of contending requests for subsequent non-contending wireless data transmissions before the scheduled ending time of the TOs. For example, Ho at column 23 starting at line 23 states: "When some station does not completely use their TOs allocated in a multipoll, the last station may end its transmission prior to the nominal expiry time, and the unused channel time is then returned to the PC/AP for reallocation".

For example, the PC/AP may send another allocation poll, such as the D2 +poll shown in FIGS. 10 and 12 that provides another contention free allocation, such as U2 + Ack, as shown in FIGS. 10 and 12. However, there is clearly no suggestion of providing a new Contention Control frame (CC) that then initiates more Contention Control Intervals (CCIs) prior to the end of the last contention free TO, such as before the end of VS26 in FIG. 10 or before the end of VS2 in FIG. 12A.

Accordingly, independent claims 1, 10, 19, and 28, and the associated dependant claims are allowable under 35 U.S.C. § 103(a) over Benveniste (US Patent Application Publication No. 20020163933) in view of Ho (U.S. Patent No. 6,970,422).

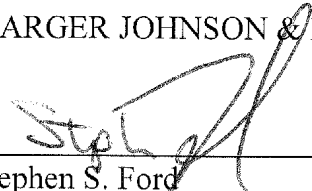
CONCLUSION

In summary, reconsideration and allowance of claims 1-6, 8-15, 17-24, and 26-33, 35, and 36 as amended is respectfully requested.

The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

Respectfully submitted,

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